feet, voice mode is 60 nautical miles, MCW and beacon is 80 nautical miles, and auto direction finder is 50 nautical miles. On the ground, effectiveness is one-half to one mile or more, depending on terrain.

Test equipment for the AN/PRC-90 radio consists of three pieces of gear: the AN/PRM-32 and AN/PRM-32A test sets for use at O-level, and the TS-24B-N test set at I-level. The NavAir maintenance manual (16-30PRC90-2) allows the use of commercial test equipment at I-level in lieu of the TS-24N-B.

The BA-1568/U alkaline batteries have been replaced by long-life BA-5368/U $LiMnO_2$ (lithium manganese dioxide) ones. This new battery gives longer operating time and improves operation in extreme temperatures.

The newest generation of radio is the AN/PRC-90-2. It combines the features of the AN/PRC-90-1 into a more useful design that closely resembles the original radio. The typical communication range is similar to the AN/PRC-90-1, but a high-power mode increases the voice range to 125 nautical miles at 10,000 feet.

The new radio also is rated to operate in water 50 feet deep for five minutes or 2 feet deep for 24 hours. It is tested at O-level, using the AN/PRM-32A and adapter 7005-0744-000, NSN 593501-480-7294. The adapter is required to match the radio impedance to the test set. The I-level test set remains the TS-24B-N or prescribed commercial substitute.

The AN/PRC-90-2C and AN/PRC-90-T are two other radios in the dash-90 series. These units are training radios and operate on a radio frequency that will not interfere with normal search-and-rescue operations.

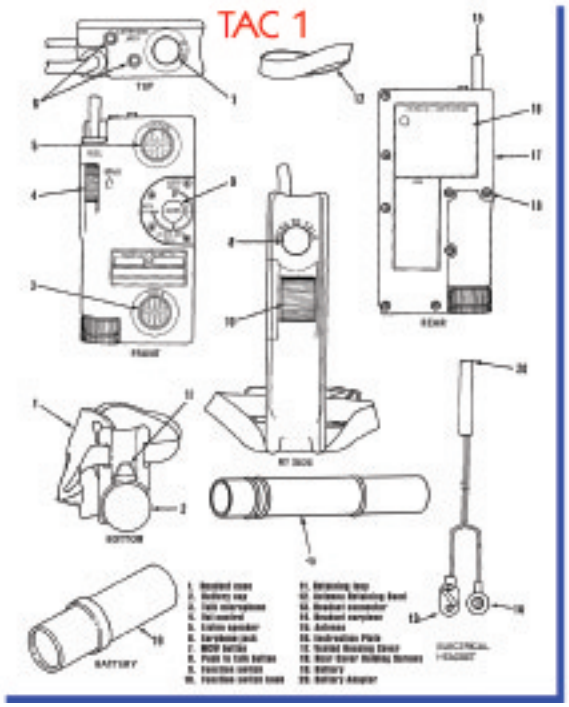
An updated technical manual will include all current IRACs and was to be published and distributed in early spring 2002. The calibration procedures and accuracy for the AN/PRM-32 and -32A test sets also are being reviewed at Corona Calibration Facility. A new GPS search and rescue radio—the AN/PRC-149—is scheduled for production and ultimately will replace the AN/PRC-90 radio and the basic AN/PRC-112 series radio but not the AN/PRC-112B.

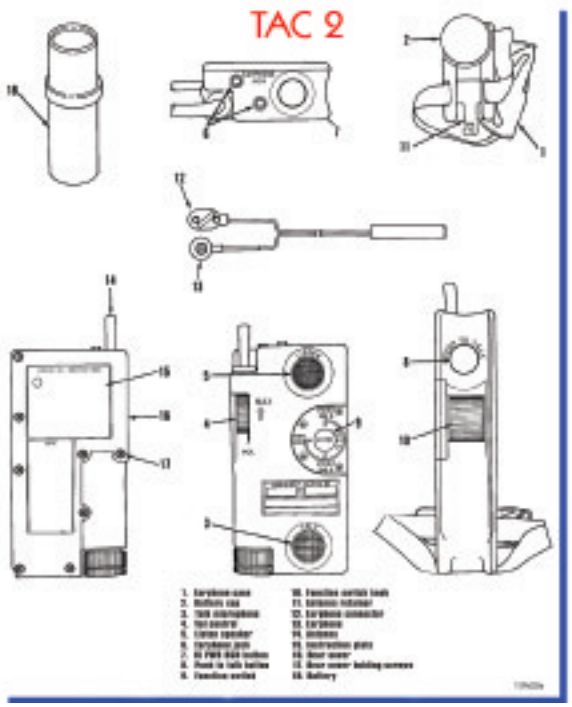
The AN/PRC-90 and 90-2 Series will be in the Navy system for several more years, so proper "care and feeding" is essential to make sure useable radios are available in the future.

Senior Chief Revard is a maintenance analyst at the Naval Safety Center.

For more info…

NavAir 16-30PRC90-2, Maintenance Instructions, Organizational and Intermediate, for Radio Sets AN/PRC-90 and AN/PRC-90-2, covers the maintenance requirements for the AN/PRC-90 Series radios. A PRC-112 Survival Radio Matrix website has been built and is available at https: /hswya2.brooks.af.mil/common/mil-gov/prc112/main.asp (the site is secure, hence https not http).





Aviation Maintenance Managers Safety Resource Guide

This cutout gives maintenance managers a pocket-sized, ready reference for safety programs. The guide includes the newest concepts in awareness: ORM, maintenance-resource management, and human factors in maintenance. It also lists references and websites. The guide is easy to use: cut it out, fold it in half, and then fold it in thirds.

A note from the aviation maintenance and material team: The message announcing the maintenance malpractice presentation (MMP) and Safety Survey Team FY03 schedule will be released in September. Be on the lookout for it. This message will contain POCs and instructions on how to sign up for these Naval Safety Center products or services.